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March 8, 2004



# The United States of America



## The Director of the United States Patent and Trademark Office

*Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.*

*Therefore, this*

### United States Patent

*Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America for the term set forth below, subject to the payment of maintenance fees as provided by law.*

*If this application was filed prior to June 8, 1995, the term of this patent is the longer of seventeen years from the date of grant of this patent or twenty years from the earliest effective U.S. filing date of the application, subject to any statutory extension.*

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US006074694A

**United States Patent** [19]

Friese et al.

[11] Patent Number: **6,074,694**[45] Date of Patent: **Jun. 13, 2000**

[54] PROCESS OF APPLYING MATERIAL, IN PARTICULAR FOR THE PRODUCTION OF ELECTRODES FOR EXHAUST GAS SENSORS

[75] Inventors: **Karl-Hermann Friese, Leonberg; Siegfried Nees, Neckarwestheim; Frank Stanglmeier, Moeglingen; Hans Baumann, Sternenfels, all of Germany**

[73] Assignee: **Robert Bosch GmbH, Stuttgart, Germany**

[21] Appl. No.: **08/827,679**

[22] Filed: **Apr. 10, 1997**

[30] Foreign Application Priority Data

Apr. 10, 1996 [DE] Germany ..... 196 14 147

[51] Int. Cl.<sup>7</sup> ..... **B05D 1/02; B05D 3/12**

[52] U.S. Cl. .... **427/233; 427/123; 427/125; 427/126.5; 427/236; 427/421; 427/426; 427/427**

[58] Field of Search ..... **427/123, 125, 427/126.5, 421, 426, 427, 233, 236**

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## [57] ABSTRACT

A process for applying materials to a carrier, for which the material is atomized just prior to applying it by compressed air that is supplied separately. The process is particularly suited for the application of electrically conductive material to carriers of ceramics materials.

16 Claims, 3 Drawing Sheets

